

**AMENDMENT TO THE CLAIMS**

Please **AMEND** claims 2, 4, 5, and 22 as follows.

Please **CANCEL** claims 3, 6, 7, and 21.

A copy of all pending claims and a status of the claims is provided below.

1. (canceled)

2. (currently amended) A method of photoresist trimming, comprising the steps of:  
arranging an opaque layer on a substrate;  
arranging a photoresist layer on the opaque layer;  
developing the photoresist layer to form a trench in the photoresist layer, wherein the trench comprises a sidewall having a resist foot;  
mixing a trimming gas comprising O<sub>2</sub> and one of CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>2</sub>; ~~and~~  
applying the trimming gas comprising O<sub>2</sub> and one of CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>2</sub> to selectively remove the resist foot, such that the sidewall is substantially perpendicular to an upper surface of the opaque layer after the applying; and  
arranging a carbon barrier on an upper surface of the photoresist layer,  
wherein the mixing and the applying comprise a plasma etching process.

3. (canceled)

4. (currently amended) The method of claim 2, wherein ~~an~~ the upper surface of the photoresist layer is resistant to etching.

5. (currently amended) The method of claim 4, further comprising polymerizing ~~an~~ the upper surface of the photoresist layer.

6. - 8. (canceled)

9. (previously presented) The method of claim 2, wherein the trimming gas comprises O<sub>2</sub> and one of CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>2</sub> in a ratio ranging from about 1:50 to 50:1.

10. (previously presented) The method of claim 2, wherein the trimming gas comprises O<sub>2</sub> and one of CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>2</sub> in a ratio ranging from 1:10 to about 10:1.

11. (previously presented) The method of claim 10, wherein the trimming gas comprises O<sub>2</sub> and one of CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>2</sub> in a ratio ranging from about 1:3.

12. (previously presented) The method of claim 2, further comprising holding the trimming gas at a pressure ranging from about 1 mT to 1000 mT.

13. (previously presented) The method of claim 2, further comprising holding the trimming gas at a pressure ranging from about 1 mT to 100 mT.

14. – 21. (canceled)

22. (currently amended) The method of claim 2, further comprising polymerizing ~~an~~ the upper layer of the photoresist layer.

23. (previously presented) The method of claim 22, wherein the applying the trimming gas causes the polymerizing.